

Remarks

Favorable reconsideration of this application, in view of the above amendments and in light of the following remarks and discussion, is respectfully requested.

Applicants respectfully request entry of this response, as the response places the application in clear condition for allowance, or alternatively places the claims in better form for appeal. Specifically, Applicants have amended independent claims to overcome rejections.

Upon entry of this response, Claims 1-14 are pending; independent Claims 1, 2, 12, 13, and 14 having been amended by way of the present response. Applicants respectfully assert that support for the changes to the claims is self-evident from the originally filed disclosure, including the original claims, and that therefore no new matter has been added.

In the outstanding Office Action, the Information Disclosure Statement (IDS) filed on December 1, 2003, was indicated as failing to comply with 37 C.F.R. § 1.98(a)(2); Claims 12-14 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,351,947 to Keller et al. (Keller); Claims 12-14 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,530,221 to Sattinger et al. (Sattinger); Claims 1, 2, 4, and 12-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Keller in view of U.S. Patent No. 4,411,616 to Neumann; Claims 1, 2, 4, and 12-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sattinger in view of Neumann; and Claims 1, 2, 4, and 12-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 2,930,195 to Blackman, Jr., et al. (Blackman) in view of Neumann.

Initially, Applicants express thanks for the Examiner's indication that independent Claims 3 and 5 are allowed.

In the Office Action, the Information Disclosure Statement (IDS) filed on December 1, 2003, was indicated as failing to comply with 37 C.F.R. § 1.98(a)(2). In response,

Applicants respectfully submit that the IDS erroneously listed the application number (09-230836) of the included English language abstract of the Japanese publication in place of the document number (11-062549). Applicants respectfully submit herewith a corrected List of References Cited by Applicants. Applicants respectfully request that the Examiner acknowledge consideration of the previously filed English language abstract by initialing and executing the enclosed List, and return a copy of the List with the next U.S. Patent Office communication.

In the Office Action, Claims 12-14 were rejected under 35 U.S.C. § 102(e) as being anticipated by Keller. Claims 12-14 were rejected under 35 U.S.C. § 102(e) as being anticipated by Sattinger. Claims 1, 2, 4, and 12-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Keller in view of Neumann. Claims 1, 2, 4, and 12-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sattinger in view of Neumann. Claims 1, 2, 4, and 12-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Blackman in view of Neumann. Applicants respectfully assert that the rejections of the claims have been overcome by the above amendments for the following reasons.

The present invention is directed to gas turbine combustors. Independent Claim 1 recites a casing configured to surround a combustor and to be disposed apart from the combustor to define an intake chamber between the combustor and the casing. A sheet-like vibration damper having at least one thin plate, which resonates with a vibration of air in the intake chamber to absorb energy of the air vibration, is attached to an inner wall of the casing by an attaching member with a vacant space therebetween. Independent Claim 12 recites a casing surrounding an intake chamber, the casing configured to surround a combustor and to be disposed apart from the combustor and the casing. A damper is connected to an inner wall of the casing and is configured to resonate with a vibration of air in the intake chamber, the

damper including a first section and a second section having a thickness greater than the first section.

Regarding the rejections under 35 U.S.C. § 102(e), Keller is directed to a combustion chamber for a gas turbine. As shown in Figure 1, for example, of Keller, a combustion zone 23, which is bound by an inner wall 12, is surrounded by an outer wall 11.¹

Applicants respectfully assert that Keller does not teach, however, the claimed features of a damper configured to resonate with a vibration of air in an intake chamber connected to an inner wall of the casing, the casing configured to surround a combustor, as recited in independent Claim 12. Specifically, Applicants respectfully assert that Keller does not show or state a damper connected to the outer wall 11 (i.e., a casing) configured to surround the combustion zone 23 bound by the inner wall 12 (i.e., a combustor), for example.

In particular, independent Claim 12 recite “the casing configured to surround a combustor . . . and a damper connected to an inner wall of the casing and configured to resonate with a vibration of air in the intake chamber.” Thus, Applicants respectfully request that the rejection of independent Claim 12 under 35 U.S.C. § 102(e) in view of Keller be withdrawn.

Sattinger is directed to a modular resonator for suppressing combustion instabilities. As shown in Figure 1, for example, of Sattinger, modular resonators 50 are disposed on a transition assembly 30, which are disposed within a casing 12.

Applicants respectfully assert that Sattinger does not teach, however, the claimed features of a damper configured to resonate with a vibration of air in an intake chamber connected to an inner wall of the casing, the casing configured to surround a combustor, as recited in independent Claim 12. Specifically, Applicants respectfully assert that Sattinger does not show or state a damper connected to the casing 12 (i.e., a casing) configured to

¹ From Column 4, lines 58 to Column 5, line 16.

surround the transition assembly 30 (i.e., a combustor), but rather shows the modular resonator 50 connected to the transition assembly 30, for example.

Thus, Applicants respectfully request that the rejection of independent Claim 12 under 35 U.S.C. § 102(e) in view of Sattinger be withdrawn.

Regarding the rejections under 35 U.S.C. § 103(a), as discussed above Keller is directed to the combustion chamber for the gas turbine. Applicants respectfully assert that Keller does not teach or suggest, however, the claimed features of a damper configured to resonate with a vibration of air in an intake chamber connected to an inner wall of the casing, the casing configured to surround a combustor, as recited in independent Claims 1 and 12.

In particular, independent Claim 1 recites “a casing configured to surround a combustor . . . and a sheet-like vibration damper having at least one thin plate, which resonates with a vibration of air in the intake chamber to absorb energy of the air vibration, is attached to an inner wall of the casing.”

The Office Action relies on Neumann in an attempt to remedy the deficiencies of Keller. Applicants respectfully assert that Neumann also does not teach or suggest, however, and the Office Action does not rely on Neumann to teach or suggest, the claimed features of a damper configured to resonate with a vibration of air in an intake chamber connected to an inner wall of the casing, the casing configured to surround a combustor, as recited in independent Claims 1 and 12.

Thus, for the above reasons, Applicants respectfully assert that neither Keller nor Neumann, whether taken alone or in combination, teaches or suggests the claimed features recited in independent Claims 1 and 12. Therefore, Applicants respectfully request that the rejection of independent Claims 1 and 12 under 35 U.S.C. § 103(a) in view of Keller and Neumann be withdrawn.

As discussed above Sattinger is directed to the modular resonator for suppressing combustion instabilities. Applicants respectfully assert that Sattinger does not teach or suggest, however, the claimed features of a damper configured to resonate with a vibration of air in an intake chamber connected to an inner wall of the casing, the casing configured to surround a combustor, as recited in independent Claims 1 and 12. Although the Office Action relies on Neumann in an attempt to remedy the deficiencies of Sattinger, Applicants respectfully assert that Neumann does not teach or suggest, and the Office Action does not rely on Neumann to teach or suggest, the above-noted features. Thus, Applicants respectfully assert that neither Sattinger nor Neumann, whether taken alone or in combination, teaches or suggests the claimed features recited in independent Claims 1 and 12. Therefore, Applicants respectfully request that the rejection of independent Claims 1 and 12 under 35 U.S.C. § 103(a) in view of Sattinger and Neumann be withdrawn.

Blackman is directed to an oscillating flow combustion chamber. As shown in Figures 1 and 2, for example, of Blackman, an absorptive liner 20 is provided between a lip 16 and an outer wall 22 of the combustion chamber.²

Applicants respectfully assert that Blackman does not teach or suggest, however, the claimed features of a damper configured to resonate with a vibration of air in an intake chamber connected to an inner wall of the casing, the casing configured to surround a combustor, as recited in independent Claims 1 and 12. Specifically, Applicants respectfully assert that Blackman does not show or state the absorptive liner 20 (i.e., a damper) connected to a casing configured to surround a combustor, for example.

The Office Action relies on Neumann in an attempt to remedy the deficiencies of Blackman. Applicants respectfully assert that Neumann also does not teach or suggest,

² Column 2, lines 16-18.

however, and the Office Action does not rely on Neumann to teach or suggest, the above-noted features.

Thus, for the above reasons, Applicants respectfully assert that neither Blackman nor Neumann, whether taken alone or in combination, teaches or suggests the claimed features recited in independent Claims 1 and 12. Therefore, Applicants respectfully request that the rejection of independent Claims 1 and 12 under 35 U.S.C. § 103(a) in view of Blackman and Neumann be withdrawn.

Applicants respectfully assert that the outstanding grounds of rejection of independent Claims 1 and 12 have been overcome for the above reasons, and therefore respectfully request the allowance of these independent claims.

Applicants respectfully assert that dependent Claims 2, 4, 6-11, 13, and 14 are allowable for the same reasons as the independent claims, from which they depend, as well as for their own features. Thus, Applicants respectfully request that withdrawn Claims 6-11 be treated on the merits, and the allowance of dependent Claims 2, 4, 6-11, 13, and 14.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-14 is earnestly solicited.

Application No. 10/023,702
Reply to Office Action of January 23, 2004

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact the undersigned representative at the below listed telephone number.

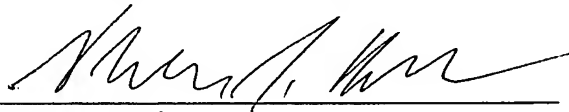
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Respectfully Submitted,

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